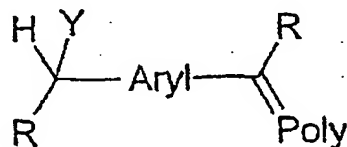
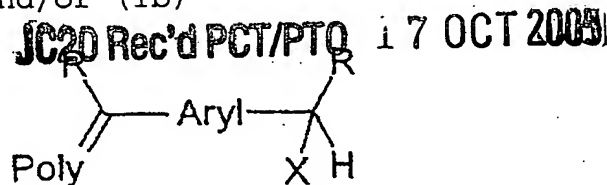


11. Poly(arylenevinylenes) containing at least 0.1 mol% of units of the formula (Ia) and/or (Ib)

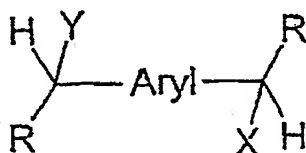


Formula (Ia)



Formula (Ib)

obtainable from bis(halomethyl)arylenes or halomethylsulfinylmethylarylenes by base-induced dehydrohalogenation, characterized in that the reaction is carried out in the presence of 0.1-80 mol% of one or more compounds of the formula (I):



Formula (I)

where the symbols are defined as follows:

Aryl is the same or different at each instance and is a bivalent aromatic or heteroaromatic ring system which has from 2 to 40 carbon atoms and may be substituted by  $R^1$  radicals or else be unsubstituted, or an  $R^1$ -substituted or unsubstituted stilbenylene unit; the two substituents CHXR and CHYR are arranged in such a way that there is an even number of aromatic atoms between them; the aryl and heteroaryl systems may also be part of a larger fused aromatic ring system; the possible substituents  $R^1$  may potentially be situated at any free position;

R is the same or different at each instance and is an alkyl chain which has from 1 to 40 carbon atoms and may be straight-chain, branched or cyclic, and may also be substituted by one or more  $R^1$  radicals or be unsubstituted, in which one or more nonadjacent carbon atoms may also be replaced by  $-\text{CR}^2=\text{CR}^2-$ ,  $-\text{C}\equiv\text{C}-$ ,  $-\text{NR}^2-$ ,  $-\text{O}-$ ,  $-\text{S}-$ ,  $-\text{CO}-$ ,  $-\text{CO}-\text{O}-$ ,

-CONR<sup>2</sup>-, -O-CO-O-, and one or more hydrogen atoms may also be replaced by fluorine, an aromatic or heteroaromatic ring system which has from 2 to 40 carbon atoms and may be substituted by R<sup>1</sup> or be unsubstituted, an R<sup>1</sup>-substituted or unsubstituted stilbenyl or tolanyl unit, -Si(R<sup>2</sup>)<sub>3</sub>, -N(R<sup>2</sup>)<sub>2</sub>, -OR<sup>2</sup> or a combination of these systems; the aryl and heteroaryl systems may also be part of a larger fused aromatic ring system; the possible substituents may potentially be situated at any free position;

X is the same or different at each instance and is Cl, Br, I, trifluoromethanesulfonate or arylsulfonate;

Y is the same or different at each instance and is Cl, Br, I, trifluoromethanesulfonate, arylsulfonate, -S(O)-R<sup>2</sup> or R<sup>1</sup>;

R<sup>1</sup> is the same or different at each instance and is a straight-chain, branched or cyclic alkyl chain having from 1 to 40 carbon atoms, in which one or more nonadjacent carbon atoms may also be replaced by -CR<sup>2</sup>=CR<sup>2</sup>-, -C≡C-, -NR<sup>2</sup>-, -O-, -S-, -CO-, -CO-O-, -CONR<sup>2</sup>-, -O-CO-O-, and one or more hydrogen atoms may be replaced by fluorine, an aromatic or heteroaromatic ring system which has from 2 to 40 carbon atoms and may also be substituted by one or more nonaromatic R<sup>1</sup> radicals, a substituted or unsubstituted vinyl group or Cl, F, CN, N(R<sup>2</sup>)<sub>2</sub>, B(R<sup>2</sup>)<sub>2</sub>; the aryl and heteroaryl systems may also be part of a larger fused aromatic ring system; the possible substituents may potentially be situated at any free position; two or more R<sup>1</sup> radicals together may also form a ring system;

R<sup>2</sup> is the same or different at each instance and is H, a straight-chain, branched or cyclic alkyl chain having 1 to 22 carbon atoms, in which one or more nonadjacent carbon atoms may also be replaced by -O-, -S-, -CO-O-, -O-CO-O-, and one or more

hydrogen atoms may also be replaced by fluorine, an aryl or heteroaryl system which has from 2 to 40 carbon atoms and may also be substituted by one or more nonaromatic R<sup>1</sup> and

5 Poly represents a bond to a poly(arylenevinylene) main chain.